

Title (en)
Air conditioner

Title (de)
Klimaanlage

Title (fr)
Climatiseur

Publication
EP 2428752 A3 20150415 (EN)

Application
EP 11155869 A 20110224

Priority
JP 2010202006 A 20100909

Abstract (en)
[origin: EP2428752A2] An air conditioner is provided with a heat storage tank 32 that accommodates a heat storage material 36 for storing therein heat generated by a compressor 6 and a heat storage heat exchanger 34. A heat storage bypass circuit is provided to connect a refrigerant pipe between an indoor heat exchanger 16 and an expansion valve 12 and a refrigerant pipe between a four-way valve 8 and an inlet port defined in the compressor 6, and a defrosting bypass circuit is provided to connect a refrigerant pipe between the expansion valve 12 and an outdoor heat exchanger 14 and a refrigerant pipe between an outlet port defined in the compressor 6 and the four-way valve 8. The heat storage heat exchanger 34 and a heat storage two-way valve 42 are provided in the heat storage bypass circuit, and a defrosting two-way valve 30 is provided in the defrosting bypass circuit. If a temperature detected by a compressor temperature sensor 58, a compressor discharge temperature sensor 60, or a heat storage tank temperature sensor 50 exceeds a first predetermined temperature, the heat storage two-way valve 42 is opened to introduce a refrigerant, which has passed through the indoor heat exchanger 16 or the outdoor heat exchanger 14, into the heat storage heat exchanger 34.

IPC 8 full level
F25B 13/00 (2006.01); **F25B 31/00** (2006.01); **F25B 47/02** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)
C09K 11/00 (2013.01); **F25B 31/006** (2013.01); **F25B 47/022** (2013.01); **F25B 49/022** (2013.01); **F25B 2400/04** (2013.01); **F25B 2400/05** (2013.01); **F25B 2400/24** (2013.01); **F25B 2600/0253** (2013.01); **F25B 2600/2501** (2013.01); **F25B 2700/2111** (2013.01); **F25B 2700/2115** (2013.01); **F25B 2700/21152** (2013.01)

Citation (search report)

- [YA] JP S60175976 A 19850910 - MATSUSHITA ELECTRIC IND CO LTD
- [Y] JP S63156980 A 19880630 - MATSUSHITA ELECTRIC IND CO LTD
- [A] JP S6321449 A 19880129 - TOSHIBA CORP
- [YA] WO 2010036614 A2 20100401 - CARRIER CORP [US], et al

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

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EP 2428752 A2 20120314; **EP 2428752 A3 20150415**; CN 102401427 A 20120404; CN 102401427 B 20160203; JP 2012057870 A 20120322; JP 5108923 B2 20121226

DOCDB simple family (application)
EP 11155869 A 20110224; CN 201110054190 A 20110304; JP 2010202006 A 20100909